

CLAIMS:

1. Method for determining a moment in a preparation process of food at which the food has reached a ready state, the method comprising the following steps:
 - determining a initial water content of the food;
 - determining a final water content of the food, which is associated with the
- 5 ready state of the food;
 - determining an actual quantity of the food;
 - determining a required quantity of released water, i.e. a quantity of water to be released during the preparation process in order for the food to reach the ready state, on the
- 10 basis of the determined actual quantity of the food and a difference between the initial water content of the food and the final water content of the food; and
 - performing measurements during the preparation process in order to determine a moment on which an actual quantity of released water corresponds to the required quantity of released water.
- 15 2. Method according to claim 1, comprising the following steps:
 - collecting the water which is released during the preparation process;
 - determining an actual quantity of released water; and
 - comparing the actual quantity of released water to the required quantity of released water in order to determine a moment in the preparation process when the actual
- 20 quantity of released water corresponds to the required quantity of released water.
3. Method according to claim 1 or 2, comprising the following steps:
 - determining the extent to which the weight of the food needs to be reduced in order for the food to reach the ready state, on the basis of the difference between the initial
- 25 water content of the food and the final water content of the food;
 - determining an initial weight of the food at the start of the preparation process;
 - determining a required final weight of the food on the basis of the determined initial weight of the food and the determined reduction of the weight of the food;
 - determining an actual weight of the food during the preparation process; and

- comparing the actual weight of the food to the required final weight of the food in order to determine a moment in the preparation process when the actual weight of the food corresponds to the required final weight of the food.
- 5 4. Method according to claim 3, wherein the preparation process of the food takes place in a preparation device (1, 2, 3), the method comprising the following steps:
- determining an empty weight of the preparation device (1, 2, 3), i.e. a weight of the preparation device (1, 2, 3) without inserted food;
 - inserting the food into the preparation device (1, 2, 3);
 - 10 - determining a total weight of the preparation device (1, 2, 3) and the inserted food; and
 - determining a weight of the inserted food by subtracting the empty weight of the preparation device (1, 2, 3) from the total weight of the preparation device (1, 2, 3) and the inserted food.
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5. Method according to claim 3, wherein the preparation process of the food takes place in a preparation device (1, 2, 3) containing a preparation medium, the method comprising the following steps:
- determining a total weight of the preparation device (1, 2, 3) and the
 - 20 preparation medium;
 - inserting the food into the preparation device (1, 2, 3);
 - determining a total weight of the preparation device (1, 2, 3), the preparation medium and the inserted food; and
 - determining a weight of the inserted food by subtracting the total weight of the
 - 25 preparation device (1, 2, 3) and the preparation medium from the total weight of the preparation device (1, 2, 3), the preparation medium and the inserted food.
6. Method according to claim 5, comprising the following steps:
- determining a minimum weight of the preparation medium, which is
 - 30 associated with a minimum quantity of the preparation medium that needs to be present in the preparation device (1, 2, 3) in order for the preparation process to take place in a proper and/or safe manner;
 - determining an empty weight of the preparation device (1, 2, 3), i.e. a weight of the preparation device (1, 2, 3) without preparation medium and inserted food;

- determining an actual weight of the preparation medium by subtracting the empty weight of the preparation device (1, 2, 3) from the total weight of the preparation device (1, 2, 3) and the preparation medium; and
 - comparing the actual weight of the preparation medium to the minimum weight of the preparation medium.
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7. Method according to claim 5 or 6, comprising the following steps:
- determining a maximum weight of the preparation medium, which is associated with a maximum quantity of the preparation medium that is allowed in the preparation device (1, 2, 3) in order for the preparation process to take place in a proper and/or safe manner;
 - determining an empty weight of the preparation device (1, 2, 3), i.e. a weight of the preparation device (1, 2, 3) without preparation medium and inserted food;
 - determining an actual weight of the preparation medium by subtracting the empty weight of the preparation device (1, 2, 3) from the total weight of the preparation device (1, 2, 3) and the preparation medium; and
 - comparing the actual weight of the preparation medium to the maximum weight of the preparation medium.
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8. Method according to any of claims 1-7, further comprising the following steps:
- defining a relation between a temperature profile of the preparation process and a crispness and/or brown level of the food; and
 - determining a temperature profile which needs to be realized during the preparation process in order for the food to obtain a predetermined crispness and/or brown level, on the basis of the defined relation between the temperature profile of the preparation process and the value of crispness and/or brown level of the food.
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9. Method according to claim 8, comprising the following steps:
- determining a speed at which the water is released from the food;
 - estimating an actual duration of the preparation process on the basis of the determined speed and the difference between the initial water content of the food and the final water content of the food;
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- comparing the estimated actual duration of the preparation process to a duration of the preparation process that is required on the basis of the temperature profile; and, in case a difference between the estimated actual duration of the preparation process and the required duration of the preparation process is found,
- 5 - adjusting the temperature profile such that it is possible for the food to substantially simultaneously reach the ready state and the predetermined crispness and/or brown level.
- 10 10. Method according to any of claims 1-9, wherein the food is subjected to a frying process, during which the food is fried in a preparation medium such as oil, and which comprises at least two steps having specific temperature profiles.
- 15 11. Method according to claim 10, wherein the food is taken out of the preparation medium between two successive steps.
- 20 12. Preparation device (1, 2, 3) for subjecting food to a preparation process, comprising:
 - a housing (10) having a compartment (15) for receiving and containing food;
 - weighing means (20) for performing weighing processes in which at least aportion of the housing (10) having the compartment (15) is weighed; and
 - controlling means for registering and processing results of the weighing processes as performed by the weighing means (20), wherein the controlling means are programmed such as to perform the method according to any of claims 1-11.
- 25 13. Preparation device (1, 2, 3) according to claim 12, further comprising input means which are to be set by a user of the preparation device (1, 2, 3), wherein a manner in which the input means are set is specific of the type of food which is inserted in the preparation device (1, 2, 3).
- 30 14. Preparation device (1, 2, 3) according to claim 13, wherein a manner in which the input means are set is specific of a desired crispness and/or brown level of the food.
15. Preparation device (1, 2, 3) according to claim 13 or 14, wherein a manner in which the input means are set is specific of a desired ready state of the food.

16. Preparation device (1, 2, 3) according to any of claims 12-15, further comprising a condenser (17) for collecting water which is released during a preparation process of food.
- 5 17. Preparation device (1, 2, 3) according to claim 16, further comprising additional weighing means (20) which are positioned underneath the condenser (17).
- 10 18. Preparation device (1, 2, 3) according to any of claims 12-17, wherein the housing (10) comprises an inner housing (11) and an outer housing (12), wherein the inner housing (11) is located inside the outer housing (12), and wherein the weighing means (20) are located outside the inner housing (11), but inside the outer housing (12).
- 15 19. Preparation device (1, 2, 3) according to any of claims 12-18, further comprising retaining means for keeping the compartment (15) closed during the preparation process.
- 20 20. Preparation device (1, 2, 3) according to any of claims 12-19, being a fryer (1, 2, 3) which comprises the following components:
- 20 - a basket (14) for receiving and containing food; and
- an oil bowl (15) for receiving and containing a preparation medium such as oil, and for receiving and containing the basket (14).
- 25 21. Preparation device (1, 2, 3) according to claim 20, further comprising basket detecting means for detecting whether the basket (14) has been placed in the oil bowl (15) or not.
- 30 22. Preparation device (1, 2, 3) according to claim 20 or 21, further comprising automatic lifting means for lifting the basket (14) on receipt of a signal originating from the controlling means, wherein the signal is at least transmitted at an end of the preparation process.
23. Preparation device (4) for subjecting food to a preparation process, in particular a microwave oven (4), comprising:

- a dish (30) for supporting food;
 - a scale (20) for performing weighing processes in which at least the dish (30) is weighed; and
 - controlling means for registering and processing results of the weighing
- 5 processes as performed by the scale (20), wherein the controlling means are programmed such as to perform the method according to claim 1 or 3.

24. Preparation device (4) according to claim 23, further comprising input means which are to be set by a user of the preparation device (4), wherein a manner in which the
10 input means are set is specific of the type of food which is inserted in the preparation device (4).

25. Preparation device (4) according to claim 24, wherein a manner in which the input means are set is specific of a desired ready state of the food.